



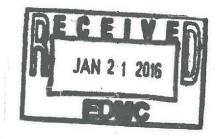
OFFICE OF RIVER PROTECTION

P.O. Box 450, MSIN H6-60 Richland, Washington 99352

JAN 20 2016

15-ECD-0061

Mr. J.M. St. Julian
Project Manager
Bechtel National, Inc.
2435 Stevens Center Place
Richland, Washington 99354



Mr. St. Julian:

CONTRACT NO. DE-AC27-01RV14136 – SUBMITTAL OF U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION ASSESSMENT REPORT S-15-ECD-RPPWTP-002, BECHTEL NATIONAL, INC. HAZARDOUS WASTE GENERATOR ACTIVITIES

This letter transmits the Bechtel National, Inc. (BNI) Hazardous Waste Generator Activities assessment report. The purpose of the assessment was to verify BNI hazardous waste generator compliance with Federal and State hazardous/dangerous waste regulations. BNI has an active and mature waste management program. The assessment team identified no findings and four opportunities for improvement concerning waste labeling, spill control kit content, waste location identification, and waste package labeling.

The action taken herein is considered to be within the scope of work of the existing contract and does not authorize the Contractor to incur any additional costs (either direct or indirect) or delay delivery to the Government. If the Contractor considers that carrying out this action will increase contract/project costs or delay of delivery, the Contractor shall promptly notify the Contracting Officer orally, confirming and explaining the notification in writing within ten (10) calendar days, and otherwise comply with the requirements of the Contract clause I.84 FAR 52.243-7, -- "Notification of Changes (APR 1984)." Following submission of the written notice of impacts, the Contractor shall await further direction from the Contracting Officer.

If you have any questions, please contact me, or your staff may contact Gae M. Neath, Environmental Compliance Division, (509) 376-7828.

William F. Hamel

Assistant Manager, Federal Project Director Waste Treatment and Immobilization Plant

ECD:GMN

Attachment

cc: See page 2

cc w/attach:
B.G. Erlandson, BNI
M.G. McCullough, BNI
S.L. Dahl, Ecology
Administrative Record (H-0-8)
BNI Correspondence
Environmental Portal, LMSI

Attachment 15-ECD-0061 (19 Pages)

Bechtel National, Inc. Hazardous Waste Generator Activities
Assessment Report S-15-ECD-RPPWTP-002

U.S. Department of Energy Office of River Protection

Assessment Report Number:

S-15-ECD-RPPWTP-002

Division Performing the Assessment:

U.S. Department of Energy, Office of River Protection, Environmental Compliance Division

Integrated Assessment Schedule Number:

16040

Title of Assessment:

Bechtel National Inc. Hazardous Waste

Generator Activities

Dates of Assessment:

October 1 through December 31, 2015

Assessment Lead:

Gae Neath, U.S. Department of Energy, Office

of River Protection, Environmental Compliance

Division

Team Member(s) (if any):

Rana Evans, U.S. Department of Energy, Office

of River Protection, Environmental Compliance

Division

Joe Sondag, U.S. Department of Energy, Office of River Protection, Environmental Compliance

Division

Scope:

The scope of this Level 2 assessment was to verify Bechtel National Incorporated (BNI) hazardous waste generator compliance with Federal and State hazardous/dangerous waste regulations.

Interviewees:

- BNI Hazardous Waste Supervisor
- BNI Regulatory Compliance and Waste Management staff

Documents Reviewed:

- 40 CFR 279.22 Used Oil Storage
- Washington Administrative Code (WAC) 173-200, Accumulating Dangerous Waste Onsite
- WAC 173-303-330, Personnel Training
- WAC 173-303-340, Preparedness and Prevention

- WAC 173-303-350, Contingency Plan and Emergency Procedures
- WAC 173-303-515, Standards for the Management of Used Oil
- WAC 173-303-573, Standards for Universal Waste Management
- WAC 173-303-630, Use and Management of Containers
- 24590-WTP-GPP-SENV-007, Dangerous Waste Accumulation and Handling
- 24590-WTP-GPP-SENV-017, 90-Day Accumulation Area Training
- 24590-WTP-GPP-SENV-011, Spill and Release Response
- 24590-WTP-GPP-SIND-003, Construction Site Emergency Action Plan

Discussion of Areas or Activities Reviewed:

Lines of inquiry (LOI) were developed through review of the applicable regulations, previous U.S. Department of Energy, Office of River Protection assessment reports, and Washington State Department of Ecology inspection reports. The LOIs were transmitted to BNI personnel two weeks prior to the field visit.

On November 16, 2015, the assessment team met with BNI staff to discuss each LOI. BNI staff discussed each LOI in detail and were able to respond to follow-up questions. The discussion resulted in ORP requesting additional documentation. The response for each LOI is contained in the Attachment.

The used oil tanks onsite were inspected and were found to be labeled "Used Oil" but were also labeled as "Waste Oil." The used oil is recycled and identifying the tanks as waste oil provides extraneous and potentially misleading information (Opportunity for Improvement S-15-ECD-RPPWTP-002-O01).

The Satellite Accumulation Areas (SAA) were then inspected. A used fuel drum was stored in a locked flammable locker. The drum had a bung funnel with a locking lid. The team verified that the drum is considered to be closed if the funnel is screwed into the drum.

In addition, universal waste containers were inspected. One of the boxes, that contained lamps, did not have the Waste Treatment and Immobilization Plant (WTP) package identification number label (Opportunity for Improvement S-15-ECD-RPPWTP-002-004). WTP sends universal waste to the Centralized Consolidation/Recycling Center. The "Hanford Hazardous Material Shipment Record" for the universal waste shipments was reviewed.

The spill control equipment was also inspected. There was one missing item from the spill kit (Opportunity for Improvement S-15-ECD-RPPWTP-002-O02). 24590-WTP-GPP-SENV-011, Spill and Release Response was reviewed to understand BNI's actions in the event of a spill or release of hazardous materials or chemicals.

24590-WTP-GPP-SENV-007, Dangerous Waste Accumulation and Handling, was reviewed to understand how BNI accumulates and manages dangerous waste. "WTP Waste Management

90-Day Accumulation Area Container Tracking Data" which identifies each hazardous waste container onsite was reviewed to make sure that the 90-day limit was not exceeded. WTP's "Surveillance Checklist for Satellite Accumulation Areas" was also reviewed to identify the areas covered during BNI's inspections.

24590-WTP-GPP-SENV-017, 90-Day Accumulation Area Training, was reviewed to verify BNI's process for training their personnel managing dangerous waste. Training records were reviewed for the Waste Handler and Hazardous Waste Supervisor.

24590-WTP-GPP-SIND-003, Construction Site Emergency Action Plan, was reviewed to become familiar with WTP's Emergency Action Plan. Specific locations for the 90-Day Accumulation Areas, SAAs and Universal/Recycling container storage areas were not identified in the Emergency Action Plan (Opportunity for Improvement S-15-ECD-RPPWTP-002-O03).

Universal waste containers were inspected. The "WTP Waste Management Universal Waste/Recycling Container Tracking Data" which identifies each container onsite was reviewed. One of the boxes that contained lamps did not have the WTP package identification number label (Opportunity for Improvement S-15-ECD-RPPWTP-002-O04). WTP sends universal waste to the Centralized Consolidation/Recycling Center. The "Hanford Hazardous Material Shipment Record" that accompanies each universal waste shipment was reviewed.

Summary of Findings, Opportunities for Improvement, or Assessment Follow-up Items:

During this assessment four Opportunities for Improvement were identified. The following is a summary of those items:

Opportunities for Improvement:

S-15-ECD-RPPWTP-002-O01; Sondag – The used oil tanks were labeled with extraneous information.

Discussion: The regulations state that the containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil." The used oil tanks located were labeled "Used Oil" but were also labeled as "Waste Oil." The used oil is recycled and identifying the tanks as waste oil provides extraneous and potentially misleading information. The "Waste Oil" labels were removed on December 10, 2015.

S-15-ECD-RPPWTP-002-O02; Neath - Spill control equipment had missing items.

Discussion: The spill kit located outside the 90-Day Accumulation Area had an itemized list of the equipment included in the container. When the contents of the container were verified against the list, the gloves were not included. Nitrile gloves were immediately placed in the spill kit during the field walk down.

S-15-ECD-RPPWTP-002-O03; Evans/Sondag – Specific locations for the 90-Day Accumulation Area, SAAs and Universal/Recycling container storage area were not identified on the container tracking data lists nor in the *Construction Site Emergency Action Plan*.

Discussion: Specific facility locations were not provided on the container tracking data lists. The Balance of Facilities Waste Storage was listed as the location for the 90-Day Accumulation Area and certain SAAs; however, the containers are in conex boxes identified as W-15A and W-15B, respectively. Balance of Facilities Waste Storage was also identified on the container tracking data list, and the actual facility locations were identified as W-197 and W-126. Also, the Operating Engineer Shop was shown as a location on the container tracking data list but the facility location is T-41.

24590-WTP-GPP-SIND-003, Construction Site Emergency Action Plan, describes the 90-Day Accumulation Area and identifies affiliated buildings W-15A, W-15B, W-126, and W-127. Figures 1 and 2 in the plan did not identify these buildings or clarify the location of the 90-Day Accumulation Area. Section 8.0, Emergency Equipment, in the plan references the 90-Day Accumulation Area several times as the location for equipment. Reference is also made to "conex building" and "between two conex buildings." The locations of these areas are not clarified adequately within the plan. Including the facility or building location on the container tracking data list, as well as the Construction Site Emergency Action Plan, could aid emergency responders in identifying precise locations for the containers.

S-15-ECD-RPPWTP-002-O04; Neath – One of the universal waste containers had a missing WTP package identification number label.

Discussion: One of the universal waste lamp boxes has the correct universal waste label and date, but did not include the unique WTP package identification number label. The package identification number label was placed on the box the week of November 30, 2015.

Conclusion:

BNI has an active and mature waste management program. The assessment identified no findings and four opportunities for improvement.

Lead Assessor: _	Jomnus	Date: 01/13/2018
ECD Division Di	rector: July	Date:

Attachment Lines of Inquiry:

	Requirement			
		•	Notes	
	40 CFR 279.22, "Used oil storage"	(a) Storage units. Used oil generators shall not store used oil in units other than tanks, containers, or units subject to regulation under parts 264 or 265 of this chapter.	Used oil was stored in two 500 gallon tanks (see Photo 1). Used oil tanks were in good	
1		(b) Condition of units. Containers and aboveground tanks used to store used oil at generator facilities must be: (1) In good condition (no severe rusting, apparent structural defects or deterioration); and (2) Not leaking (no visible leaks).	condition, not leaking, and labeled with "Used Oil" and "Waste Oil."	
		(c) Labels. (1) Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."	9	
	WAC 173-303- 200, "Accumulating Dangerous Waste Onsite"	(1) A generator, not to include transporters as referenced in Washington Administrative Code (WAC) 173-303-240(3), may accumulate dangerous waste onsite without a permit for 90 days or less after the date of generation, provided that:	Used fuel is stored as a Satellite Accumulation Area (SAA). The 55 gallon drum is stored in a locked flammable locker. The locker is situated away from vehicular traffic flow. The drum has a bung funnel with a locking lid. Verified per Washington State Department of Ecology	
2		(b) The waste is placed: (i) For container accumulation (including satellite areas as described in subsection (2) of this section), the department may require that the accumulation area include secondary containment in accordance with WAC 173-303-630(7), if the department determines that there is a potential threat to public health or the environment due to the nature of the wastes being accumulated, or due to a	website that if the funnel is screwed in with gaskets and has a lid with a locking mechanism, the drum is considered to be closed.	

history of spills or releases from accumulated containers.

- (iv) The owner or operator must maintain the following records at the facility: (A) A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that they are consistent with respecting the 90-day limit, and documentation that the procedures are complied with; or (B) Documentation that the unit is emptied at least once every 90 days.
- (c) The date upon which each period of accumulation begins is marked and clearly visible for inspection on each container.
- (d) While being accumulated onsite, each container and tank is labeled or marked clearly with the words "dangerous waste" or "hazardous waste." Each container or tank must also be marked with a label or sign which identifies the major risk(s) associated with the waste in the container or tank for employees, emergency response personnel and the public.
- (2) Satellite accumulation.
- (a) A generator may accumulate as much as 55 gallons of dangerous waste or one quart of acutely hazardous waste (as defined in WAC 173-303-040) in containers at or near any point of generation where waste initially accumulates (defined as a SAA in WAC 173-303-040). The satellite area must be under the control of the operator of the process generating the waste or secured at all

24590-WTP-GPP-SENV-007, Dangerous Waste Accumulation and Handling, is used for accumulating and managing dangerous waste.

In addition, "WTP Waste management 90-Day Accumulation Area Container Tracking Data is used to ensure that the 90-day limit is not exceeded.

Each container is appropriately marked with the dates and labels (see Photo 2).

WTP uses a "Surveillance Checklist for Satellite Accumulation Areas" for their inspections. The document was reviewed.

	times to prevent improper additions of wastes to a satellite container. Satellite accumulation is allowed without a permit provided the generator: (b) When 55 gallons of dangerous waste or one quart of acutely hazardous waste (as defined in WAC 173-303-040) is accumulated, the container(s) must be marked immediately with the accumulation date and moved within three days to a	
WAC, 173-303-330, "Personnel training"	designated storage or accumulation area. (1) Training program. The facility owner or operator must provide a program of classroom instruction or on-the-job training for facility personnel. This program must teach personnel to perform their duties in a way that ensures the facility's compliance with this chapter 173-303 WAC, must teach facility personnel dangerous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed, must ensure that facility personnel are able to respond effectively to emergencies, and must include those elements set forth in the training plan required in subsection (2) of this section. (2) Written training plan. The owner or operator must develop a written training plan which must be kept at the facility and which must include the following documents and records: (a) For each position related to dangerous waste management at the facility, the job title, the job description, and the name of the	24590-WTP-GPP-SENV-017, 90-Day Accumulation Area Training, is used for personnel managing dangerous waste. Training records were reviewed for the Waste Handler and Hazardous Waste Supervisor.

		description must include the requisite skills, education, other qualifications, and duties for each position;	
		(b) A written description of the type and amount of both introductory and continuing training required for each position; and	
		(c) Records documenting that facility personnel have received and completed the training required by this section. The department may require, on a case-by-case basis, that training records include employee initials or signature to verify that training was received.	
		(3) Training records. Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred	
	WAC 173-303-340, "Preparedness and prevention"	within the same company. (1) Required equipment. All facilities must be equipped with the following, unless it can be demonstrated to the department that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:	Waste Treatment and Immobilization Plant (WTP) use radios for communication onsite.
4	,	(a) An internal communications or alarm system capable of providing immediate emergency instruction to facility personnel;	
		(b) A device, such as a telephone or a hand-held, two-way radio, capable of summoning emergency assistance from local police departments, fire	

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	WAC 173-303-	departments, or state or local emergency response teams; (c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment. (2) Contingency plan. Each owner or	Spill control equipment was inspected. There was one missing item in the spill kit. 24590-WTP-GPP-SENV-011, Spill and Release Response is used to describe specific actions to be taken in the event of a spill or release of hazardous materials or chemicals. 24590-WTP-GPP-SIND-002,
5	350, "Contingency plan and emergency procedures"	operator must have a contingency plan at his facility for use in emergencies or sudden or non-sudden releases which threaten human health and the environment. The owner or operator may develop one contingency plan that meets all regulatory requirements.	Construction Site Emergency Action Plan describes the 90-day accumulation area and identifies affiliated buildings W-15A, W-15B, W-126, and W-27. The mapping does not identify these buildings or clarify the location of the 90-day accumulation. Section 8.0 Emergency Equipment, references the 90-day accumulation area several times as the location for equipment. It also refers to "conex building" and "between two conex buildings." The locations of these areas are not clarified adequately within the
	WAC 173-303-	(a) Storage requirements for	plan. Used oil containers were
6	515, "Standards for the management of used oil"	(i) Containers must be closed at all times, except when adding or removing materials managed under this section. (ii) Containers and tanks must not be opened, handled, managed or stored in a manner that may cause the container or tank to leak or rupture.	inspected.

WAC 173-303-573, "Standards for universal waste management" (20) Waste management.

(a) Universal waste batteries. A large quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(c) Universal waste lamps. A large quantity handler of universal waste must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must immediately clean up and place in a container any universal waste lamps that show evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the lamps, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(ii) A large quantity handler of universal waste must minimize lamp breakage by accumulating lamps in Universal waste containers were inspected (see Photo 3). One of the boxes that contained lamps did not have the WTP package identification number label.

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containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. The containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; (iii) A large quantity handler of universal waste must store lamps accumulated in cardboard or fiber containers indoors, meaning in a structure that prevents a container from being exposed to the elements.

(21) Labeling/marking. A large quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below: (a) Universal waste batteries (that is, each battery), or a container or tank in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);" (c) Universal waste lamp (that is, each lamp), or a container in which the lamps are accumulated, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

(22) Accumulation time limits.
(a) A large quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the

requirements of (b) of this subsection are met.

- (c) A large quantity handler of universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:
- (i) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
- (ii) Marking or labeling the individual item of universal waste (for example, each battery, thermostat, mercury-containing equipment, or lamp) with the date it became a waste or was received;
- (iii) Maintaining an inventory system onsite that identifies the date the universal waste being accumulated became a waste or was received;
- (iv) Maintaining an inventory system onsite that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received:
- (v) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or
- (vi) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.
- (25) Offsite shipments.
- (a) A large quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal

WTP sends universal waste to the Centralized Consolidation//Recycling Center. The "Hanford

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		waste handler, a destination facility, or a foreign destination. (b) If a large quantity handler of universal waste self-transports universal waste offsite, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subsections (28) through (34) of this section while transporting the universal waste. (c) If a universal waste being offered for offsite transportation meets the definition of hazardous materials under 49 CFR 171 through 180, a large quantity handler of universal waste must package, label, mark, and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 172 through 180; (d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler	Hazardous material Shipment Record" was reviewed.
		must ensure that the receiving handler agrees to receive the	
_	WIA 0 450 500	shipment.	C
	WAC 173-303-630, "Use and management of containers"	(1) Applicability. The regulations in this section apply to owners and operators of all dangerous waste facilities that store containers of dangerous waste.	Containers were in good condition with the proper labels and storage.
8	ĝi e	(2) Condition of containers. If a container holding dangerous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the dangerous waste from the container to a container that is in good condition or manage the waste in some other way that complies with the requirements of chapter 173-303 WAC. In addition, the owner or operator must	

- address leaks and spills in accordance with the applicable provisions of WAC 173-303-145 and 173-303-360.
- (3) Identification of containers. The owner or operator must label containers in a manner which adequately identifies the major risk(s) associated with the contents of the containers for employees, emergency response personnel, and the public. The owner or operator must affix labels upon transfer of dangerous wastes from one container to another. The owner or operator must destroy or otherwise remove labels from the emptied container, unless the container will continue to be used for storing dangerous waste at the facility. The owner or operator must ensure that labels are not obscured, removed, or otherwise unreadable in the course of inspection required under WAC 173-303-320.
- (4) Compatibility of waste with containers. The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the dangerous waste to be stored, so that the ability of the container to contain the waste is not impaired.
- (5) Management of containers.
- (a) A container holding dangerous waste must always be closed, except when it is necessary to add or remove waste.
- (b) A container holding dangerous waste must not be opened, handled, or stored in a manner which may

rupture the container or cause it to leak.

(6) Inspections. At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion, deterioration, or other factors. The owner or operator must keep an inspection log including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made and the date and nature of any repairs or remedial actions taken. The log must be kept at the facility for at least five years from the date of inspection.

(7) Containment.

- (a) Container storage areas must have a containment system that is capable of collecting and holding spills and leaks. In addition to the necessary leak containment capacity, uncovered storage areas must be capable of holding the additional volume that would result from the precipitation of a maximum 25 year storm of 24 hours duration. The containment system must:
- (i) Have a base underlying the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated rainfall until the collected material is detected and removed. The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers

WTP uses a "90-Day Accumulation Area Inspection Form" for their inspection. The document was reviewed.

- are elevated or are otherwise protected from contact with accumulated liquids;
- (ii) Be designed for positive drainage control (such as a locked drainage valve) to prevent release of contaminated liquids and so that uncontaminated precipitation can be drained promptly for convenience of operation. Spilled or leaked waste and accumulated precipitation must be removed from the containment system in as timely a manner as is necessary to prevent overflow; and
- (iii) Have sufficient capacity to contain 10 percent of the volume of all containers or the volume of the largest container, whichever is greater. Only containers holding free liquids, or holding wastes designated as F020, F021, F022, F023, F026, or F027 need to be considered in this determination.
- (i) The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation; or
- (ii) The containers are elevated or are otherwise protected from contact with accumulated liquids.

Photos:

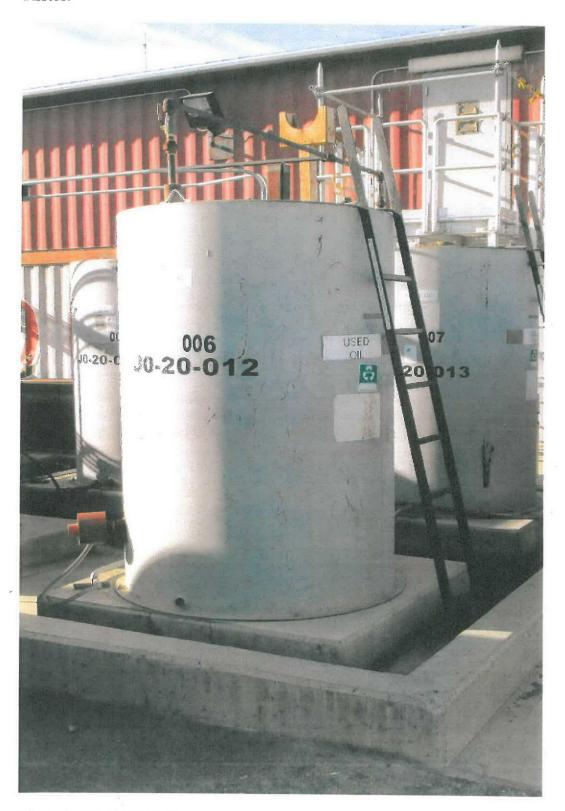


Photo 1 – Used Oil Tanks



Photo 2 – Hazardous Waste Container

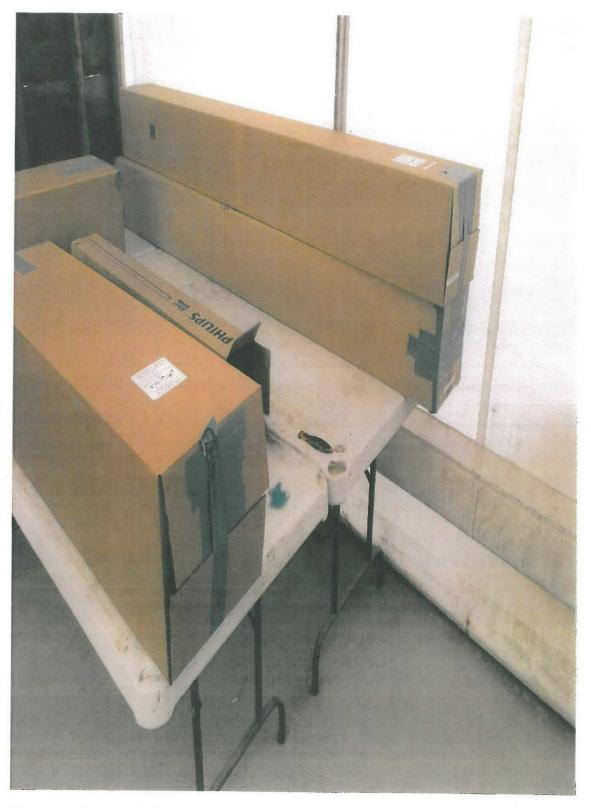


Photo 3 – Universal Waste Container